

Please add the following new claims:

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--37. The array of claim 1, wherein the compounds are arranged linearly on the support.

38. The array of claim 1, wherein at least one compound is present at at least two different positions on the support.

39. The array of claim 1, wherein at least two compounds are each present at at least two different positions on the support, successive occurrences of each compound being separated by a constant interval.

40. The array of claim 1, wherein at least one compound is present at at least three different positions on the support, successive occurrences of the compound being separated by a constant interval.

*RZ* 41. The array of claim 1, wherein all compounds are present at at least two different positions on the support, successive occurrences of each compound being separated by a constant interval.

42. The array of claim 1, wherein each different compound is present at only one position on the support.

43. The array of claim 1, wherein the support has at least two distinct portions and the array comprises at least a first synthesis product attached to a first portion and a second synthesis product attached to a second portion.

44. The array of claim 43, wherein one or both of said first and second synthesis products include a plurality of distinct chemical structures.